

Form RHA-PNC  
(5/80)SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTRL  
Radioactive Waste Shipment Prior Notification and Manifest Form

See Reverse Side for Instructions		
1. Name and Address of Shipper Umetco Minerals Corporation 137 - 47th Street Niagara Falls, NY 14302		2. Person Responsible for Radioactive Waste Shipment (a) Name G.E. Walck (b) Title Construction Superintendent (c) Telephone No (716) 278-3361
3. Radioactive Waste Transport Permit No 0211-31-84-X		4. Shipment Identification No.: 1184-117-A
5. Location from which waste will be shipped Same as (1) above		6. Name and Address of Consignee Chem-Nuclear Systems, Inc. P.O. Box 726 Barnwell, South Carolina 29812
7. Scheduled Date of Departure of Shipment. November 6, 1984		8. Estimated Date of Arrival of Shipment November 8, 1984
9. Carrier Tri-State Motor Transit	10. Type of Transport Vehicle Closed Van	11. Trailer No. and Owner (if available)
12. Routes shipment will follow in State of South Carolina (Be Specific) I-20, I-26, US-321, S.C. 3 and S.C. 64		


Manifest Summary		
13. Type Container or Cask Wood Boxes	14. Container Spec CFR 49 173.392 (c)	15. Total No of Containers 10
16. Waste Description, Physical and Chemical Form Contaminated Soil, Metal Oxides, Bldg. Rubble, Wood and Plant Hardware	17. Prominent Radionuclides Uranium (Nat.) .0028 Thorium (Nat.) .004	
18. Total Curies (mCi) .068	19. Transport Group III	20. Total Cubic Feet 650
21. Waste Classification		
<input checked="" type="checkbox"/> Radioactive LSA	<input type="checkbox"/> Bulk LSA	Normal Form
<input type="checkbox"/> Radioactive LSA greater than Type A quantities	<input type="checkbox"/> Limited quantities and radioactive devices	<input type="checkbox"/> Type A quantity <input type="checkbox"/> Type B quantity <input type="checkbox"/> Large quantity
		Special Form <input type="checkbox"/> Type A quantity <input type="checkbox"/> Type B quantity <input type="checkbox"/> Large quantity
		Fissile <input type="checkbox"/> Class I <input type="checkbox"/> Class II <input type="checkbox"/> Class III

## CERTIFICATION

I hereby certify on behalf of the above-named shipper to the South Carolina Department of Health and Environmental Control that the information provided herein is complete and correct to the best of my knowledge, and that the shipper has complied with all the provisions as required by Act No 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act

Date October 22, 1984

G.E. Walck - Construction Supt.  
Typed Name and Title of Agent of Shipper

  
Signature G.E. Walck

## CONSIGNEE ACKNOWLEDGEMENT

This acknowledges to the South Carolina Department of Health and Environmental Control that the above-described radioactive waste shipment was received.

Date of Delivery \_\_\_\_\_

Signature of Consignee or authorized Agent \_\_\_\_\_

Typed or Printed Name and Title \_\_\_\_\_

Original: S. Carolina  
Copy. Chem-Nuclear

DHEC 802  
(5/80)

(Copies of this form may be reproduced locally as needed)

UCCNHT0002574

General Instructions and Information

1. This form is to be used to provide the Department with prior notification of radioactive waste shipments transported into or within the State of South Carolina. This notification is to be made 72 hours before the expected date of arrival in the State. All written notices should be mailed to:  
Bureau of Radiological Health  
Radioactive Waste Management Section  
S.C. Dept. of Health and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201
2. A separate form shall be submitted for each radioactive waste shipment.
3. Prior notification is required of all radioactive waste shipments as defined in paragraph 2 of Interim Regulations for the Transportation of Radioactive Waste into or within South Carolina except as provided in paragraph 4.1.2 of the Regulation.
4. The "Manifest Summary" portion of this form will satisfy requirements of providing the Department with a shipping manifest, however, it does not satisfy the requirements of shipping documents which shall accompany the shipments as required by DOT Regulations and the disposal facility's license and criteria.
5. A copy of this completed form shall be provided to the carrier and all drivers of the radioactive waste shipment.
6. Upon delivery of the shipment to the consignee, acknowledgement of receipt shall be obtained, and a copy of this form and the shipper/carrier's certification form shall be returned to the Department.

Specific Instructions

Item Number

1. Self Explanatory
2. Self Explanatory
3. This item applies to all shipments of radioactive waste transported to and within the State of South Carolina.
4. Each shipment of radioactive waste shall be identified in some manner by the shipper. This number can be a radioactive shipment record number, bill of lading number, allocation number, etc. The identification number shall only be used once to identify the one shipment for which notification is being made.
5. Self Explanatory
6. Indicate in this item the disposal facility, company, organization, etc., to which this shipment has been consigned.
7. Self Explanatory
8. For through shipments, indicate in this item estimated date shipment will pass through the state.
9. Self Explanatory
10. & 11. Applies only to exclusive use, sole use, and full load shipments.
12. All routing information must be specific. You should check with carrier to insure routes you prescribe are appropriate. The carrier is responsible to inform the Department of any changes of routes in South Carolina after departure.
- thru 21. Self Explanatory

Certification: To be signed only by an authorized representative or agent of the shipper and carrier.

(1) GENERATOR NAME Umetco Minerals Corporation  
ADDRESS 137 - 47th Street  
CITY Niagara Falls STATE New York  
CONTACT G.E. Walck PHONE (716) 278-3361

(2) consigned to  
CHEM NUCLEAR SYSTEMS, INC  
P O BOX 726, OSBORN ROAD  
BARNWELL, S C 29812

**BARNWELL WASTE MANAGEMENT FACILITY**  
Operated by CHEM-NUCLEAR SYSTEMS, INC  
P O Box 726, Barnwell, South Carolina 29812  
(803) 259-1781  
RADIOACTIVE SHIPMENT MANIFEST FORM

(3) USE THIS NUMBER ON  
ALL CONTINUATION PAGES

VOLUME ALLOCATION NO  
1184-117-A

PAGE 1  
OF 2

(4) Tri-  
CARRIER State ADDRESS Joplin, Missouri 64801  
TELEPHONE 417-624-3131 SHIPPING DATE November 6, 1984  
SHIPMENT TYPE Van SHIPMENT SURFACE EXPOSURE 0.070 mR/hr  
SHIPMENT NO 615-3013 LINER SERIAL NO —  
DRIVER SIGNATURE Richard P. Jones DATE 11-7-84

(5) TOTAL FOR EACH CLASS		PROPER SHIPPING NAME & HAZARD CLASS (PER 49 CFR 172.101)	ID NUMBER
NO OF PACKAGES	WEIGHT (Pounds)		
		Radioactive Material, empty packages	UN2908
		Radioactive Material, fissile, n o s —Radioactive Material	UN2913
10	43447	Radioactive Material, low specific activity, n o s —Radioactive Material	UN2912
		Radioactive Material, n o s —Radioactive Material	UN2982
		Radioactive Material, limited quantity, n o s —Radioactive Material	UN2910
		Radioactive Material, special form, n o s —Radioactive Material	UN2974
		Radioactive Material, instruments and articles—Radioactive Material	UN2911
		Other (Specify)	

(6) SHIPMENT TOTALS							
VOLUME (Cubic Feet)	TOTAL NO OF PACKAGES	ACTIVITY (10 CFR 20.311) <input type="checkbox"/> Curies <input checked="" type="checkbox"/> Millicuries					SOURCE (Pounds)
		ALL ISOTOPES	TRITIUM	C 14	Tc 99	I 129	
650	10	0.068	NP	NP	NP	NP	1.0

(7) TOTAL SNM	
ISOTOPE	GRAMS
U 233	N/A
U 235	
TOTAL	✓

(8) TOTAL PALLET N/A  
VOLUME (CU FT)

(9) WASTE DESCRIPTION Contaminated Soil  
Misc. Debris (10) PHYSICAL FORM/  
SOLIDIFICATION AGENT Solid

(11) CHEMICAL FORM AND  
NAME AND % OF CHELATING AGENT(S) Metal Oxides

(12) WASTE FORM CLASS  
☒ A ☐ B ☐ C

(13) (X) Yes ( ) No THIS VEHICLE IS CONSIGNED EXCLUSIVE USE LOADING AND UNLOADING MUST BE  
ACCOMPLISHED BY CONSIGNOR OR CONSIGNEE OR HIS DESIGNATED AGENT

(14) IMPORTANT This is to certify that the above named materials are properly classified, described, packaged, marked  
and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of  
Transportation

Signature G.E. Walck  
Company Umetco Minerals Corporation Date 11/6/84

(15) "Certification is hereby made to the South Carolina Department of Health and Environmental Control that this shipment  
of low level radioactive waste has been inspected in accordance with the requirements of South Carolina Radioactive  
Material License No 097 as amended, and the Nuclear Regulatory Commission's License No 12 13536 01 as  
amended, and the effective Barnwell Site Disposal Criteria within 48 hours prior to shipment, and further certification is  
made that the inspection revealed no items of non compliance with all applicable laws rules and regulations "

Date 11/6/84 By G.E. Walck  
Title and Organization Construction Superintendent - Umetco Minerals Corp.  
Telephone No ( 716 ) 278-3361

- ☒ This material meets all license requirements  
☒ This material was disposed of in accordance with license  
☐ Discrepancy

NOV 14 1984

Date 11-9-84  
Authorized Signature [Signature] Title HP Tech.

UCCNHT0002576

(1) GENERATOR NAME Umetco Minerals Corporation  
ADDRESS 137 - 47th Street  
CITY Niagara Falls STATE New York  
CONTACT G.E. Walck PHONE (716) 278-3361

(2) **consigned to**  
CHEM NUCLEAR SYSTEMS, INC.  
P O BOX 726, OSBORN ROAD  
BARNWELL, S C 29812

**BARNWELL WASTE MANAGEMENT FACILITY**  
Operated by CHEM-NUCLEAR SYSTEMS, INC  
P O Box 726, Barnwell, South Carolina 29812  
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**RADIOACTIVE SHIPMENT MANIFEST FORM**

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ALL CONTINUATION PAGES

VOLUME ALLOCATION NO

PAGE 1

1184-117-A

OF 2

(4) **Tri-**  
CARRIER **State** ADDRESS Joplin, Missouri 64801  
TELEPHONE 417-624-3133 SHIPPING DATE November 6, 1984  
SHIPMENT TYPE Van SHIPMENT SURFACE EXPOSURE 070 mR/hr  
SHIPMENT NO 615-30137 LINER SERIAL NO —  
DRIVER SIGNATURE [Signature] DATE 11-7-84

(5) TOTAL FOR EACH CLASS		PROPER SHIPPING NAME & HAZARD CLASS (PER 49 CFR 172.101)	ID NUMBER
NO OF PACKAGES	WEIGHT (Pounds)		
		Radioactive Material, empty packages	UN2908
		Radioactive Material, fissile, n o s —Radioactive Material	UN2918
<u>10</u>	<u>434.7</u>	Radioactive Material, low specific activity, n o s —Radioactive Material	UN2912
		Radioactive Material, n o s —Radioactive Material	UN2982
		Radioactive Material, limited quantity, n o s —Radioactive Material	UN2910
		Radioactive Material, special form, n o s —Radioactive Material	UN2974
		Radioactive Material, instruments and articles—Radioactive Material	UN2911
		Other (Specify)	

(6) SHIPMENT TOTALS							
VOLUME (Cubic Feet)	TOTAL NO OF PACKAGES	ACTIVITY (10CFR 20.311)					SOURCE (Pounds)
		ALL ISOTOPE	TRITIUM	C 14	Tc 99	I 129	
<u>650</u>	<u>10</u>	<u>0.068</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>1.0</u>

(7) TOTAL SNM	
ISOTOPE	GRAMS
U-233	<u>N/A</u>
U-235	
TOTAL	<u>✓</u>

(9) WASTE DESCRIPTION Contaminated Soil  
Misc. Debris  
(10) PHYSICAL FORM/  
SOLIDIFICATION AGENT Solid  
(13) ☒ Yes ( ) No THIS VEHICLE IS CONSIGNED EXCLUSIVE USE LOADING AND UNLOADING MUST BE ACCOMPLISHED BY CONSIGNOR OR CONSIGNEE OR HIS DESIGNATED AGENT  
(14) IMPORTANT "This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation  
Signature [Signature]  
Company Umetco Minerals Corporation Date 11/6/84

(8) TOTAL PALLET VOLUME (CU FT) N/A  
(11) CHEMICAL FORM AND NAME AND % OF CHELATING AGENT(S) Metal Oxides  
(12) WASTE FORM CLASS ☒ A ☐ B ☐ C  
(15) "Certification is hereby made to the South Carolina Department of Health and Environmental Control that this shipment of low level radioactive waste has been inspected in accordance with the requirements of South Carolina Radioactive Material License No 097 as amended and the Nuclear Regulatory Commission's License No 12 13536 01 as amended, and the effective Barnwell Site Disposal Criteria within 48 hours prior to shipment, and further certification is made that the inspection revealed no items of non compliance with all applicable laws, rules and regulations "  
Date 11/6/84 By [Signature]  
Title and Organization Construction Superintendent - Umetco Minerals Corp.  
Telephone No (716) 278-3361

**CNSI USE ONLY**

- ☐ This material meets all license requirements  
☐ This material was disposed of in accordance with license  
☐ Discrepancy \_\_\_\_\_

**CUSTOMER'S COPY**

Form No CNS-201  
(9-83)

SEE INSTRUCTIONS ON REVERSE SIDE  
FOR FILLING OUT THIS FORM

Arrival Date \_\_\_\_\_ Arrival Survey No \_\_\_\_\_  
Date/Time Buried \_\_\_\_\_ H P Initial \_\_\_\_\_  
Trench No \_\_\_\_\_ Location Code \_\_\_\_\_  
Waste Class Code \_\_\_\_\_  
Personnel Exposure \_\_\_\_\_

Date \_\_\_\_\_  
Authorized Signature \_\_\_\_\_ Title \_\_\_\_\_

UCCNHT0002577

**FEDERAL  
EXPRESS**PLEASE COMPLETE ALL INFORMATION IN THE 5 BLOCKS OUTLINED IN ORANGE  
SEE BACK OF FORM SET FOR COMPLETE PREPARATION INSTRUCTIONS

AIRBILL NUMBER

832463413



YOUR FEDERAL EXPRESS ACCOUNT NUMBER

142

0142-1592-1

DATE

11/8/84

FROM (Your Name)

G.E. Walck

COMPANY

UMETCO MINERALS CORP

STREET ADDRESS

47TH E A STREET

CITY

NIAGARA FALLS

STATE

NY

TO (Recipient's Name)

Ms. Sybil Horton

COMPANY

Chem-Nuclear Systems Inc.

STREET ADDRESS (P.O. BOX NUMBERS ARE NOT DELIVERABLE)

Osborn Road Highway 64

CITY

Barnwell

DEPARTMENT/FLOOR NO

STATE

South Carolina

AIRBILL NO

832463413

ZIP ACCURATE ZIP CODE REQUIRED  
FOR CORRECT INVOICING

14302

IN TENDERING THIS SHIPMENT SHIPPER AGREES THAT  
F.E.C. SHALL NOT BE LIABLE FOR SPECIAL INCIDENT  
TAL OR CONSEQUENTIAL DAMAGES ARISING FROMZIP ACCURATE ZIP CODE REQUIRED  
FOR OVERNIGHT DELIVERY

29812

YOUR NOTES/REFERENCE NUMBERS (FIRST 12 CHARACTERS WILL ALSO APPEAR ON INVOICE)

84-615-885-10-100

PAYMENT ☒ Bill Shipper☐ Bill Recipient's F.E.C. Acct☐ Bill 3rd Party F.E.C. Acct☐ Bill Credit Card☐ Cash in Advance

Account Number /Credit Card Number

CARRIAGE HEREOF F.E.C. DIS  
CLAIMS ALL WARRANTIES EXPRESS OR IMPLIED WITH  
RESPECT TO THIS SHIPMENT THIS IS A NON-NEGOTIABLE  
AIRBILL SUBJECT TO CONDITIONS OF CONTRACT SET FORTH  
ON REVERSE OF SHIPPER'S COPY UNLESS YOU DECLARE A  
HIGHER VALUE THE LIABILITY OF FEDERAL EXPRESS COR  
PORATION IS LIMITED TO \$100.00 FEDERAL EXPRESS DOES  
NOT CARRY CARCO LIABILITY INSURANCE

FEDERAL EXPRESS USE

FREIGHT CHARGES

DECLARED VALUE CHARGE

SERVICES  
CHECK ONLY ONE BOX

PRIORITY 1

☐ OVERNIGHT PACKAGES  
(Up to 70 LBS.)

COURIER PAK

☐ OVERNIGHT ENVELOPE  
(Up to 2 LBS.)☐ OVERNIGHT BOX  
(Up to 5 LBS.)☐ OVERNIGHT TUBE  
(Up to 5 LBS.)

STANDARD AIR

☐ OVERNIGHT BUSINESS  
DAY FOLLOWING PICK-UP  
(Up to 70 LBS.)OVERNIGHT IS NEXT BUSINESS DAY  
(MONDAY THROUGH FRIDAY) TWO DAYS  
FROM ALASKA/HAWAII SATURDAY DELIV  
ERY AVAILABLE IN CONTINENTAL U.S.  
SEE SPECIAL HANDLINGDELIVERY AND SPECIAL HANDLING  
CHECK SERVICES REQUIRED☐ HOLD FOR PICK-UP AT FOLLOWING  
FEDERAL EXPRESS LOCATION SHOWN  
IN SERVICE GUIDE RECIPIENT'S  
PHONE NUMBER REQUIRED☒ DELIVER☐ SATURDAY SERVICE REQUIRED  
See Reverse (Extra charge applies for delivery)☐ RESTRICTED ARTICLES SERVICE (P. 1 and  
Standard Air Packages only extra charge)☐ SSS (Signature Security Service  
required extra charge applies)☐ DRY ICE \_\_\_\_\_ LBS☐ OTHER SPECIAL SERVICE \_\_\_\_\_☐☐PACKAGES WEIGHT DECLARED  
VALUE O'S

1 300

TOTAL TOTAL TOTAL

1 300

RECEIVED AT  
SHIPPER'S DOOR  
☐ REGULAR STOP  
☒ ON CALL STOP  
☐ F.E.C. OC

Federal Express Corporation Employee No

31750

DATE/TIME For Federal Express Use

11-E 1638

AGT/PRO

ADVANCE ORIGIN

AGT/PRO

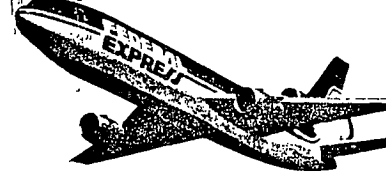
ADVANCE DESTINATION

OTHER

TOTAL CHARGES

PART# 2041730751  
FEC S 0751 D/O/B  
REVISION DATE  
2/83 GBF  
PRINTED USA

SHIPPER'S COPY

Rex Shuman  
11/8/84  
3013  
3014  
3015  
H. J. P. P. P.

UCCNHT0002578

# TELECON REPORT

TO JOHN JOINES.  
 TRI STATE  
 LOCATION  
 FROM G. E. WALCK  
 LOCATION United NIGARA  
 SUBJECT

DATE 11-6-84  
 TIME  
 FILE NO  
 DISTRIBUTION

INCORRECT Paper work WITH TRUCK DRIVER ON  
 SHIPMENT 615-3013 - TRACTOR. 2293

JOHN CALLED TR-STATE TERMINAL AT BARNWELL - NATURE OF  
 CHANGE IS 1084-117-A SHOULD BE 1184-117-A ON FORM  
 DHEC 83 ALSO ON SAT 292 OF CNS-201 UPPER RIGHT  
 HAND CORNER 1084-117-A SHOULD BE 1184-117-A AND ON  
 SAT 192 OF CNS-201 - 'ACTIVITY' SHOULD BE CHECKED IN  
 MILLICURIES BLOCK.

THEY WILL HOLD TRUCK AND MAKE THESE CHANGES

Simi an - TRI - State Motor Transp.  
 Highway 64 ~~State Motor Transp.~~

Box 251 - CX

BARNWELL, S.C.

29812

650

585

585

1859

- 1820

39 RTZ

TRK - STATE Terminal

803-259-7138

Telecom at Bureau

GENERATOR NAME United Nuclear Corporation

1084-117-A

CONTINUATION SHEET

PAGE TOTALS

~ (9-83)

UCCNHT0002581



(1) GENERATOR NAME Umetco Minerals Corporation  
ADDRESS 137 - 47th Street  
CITY Niagara Falls STATE New York  
CONTACT G E Walck PHONE (716) 278-3361

(2) consigned to  
CHEM NUCLEAR SYSTEMS, INC  
P O BOX 726 OSBORN ROAD  
BARNWELL S C 29812

**BARNWELL WASTE MANAGEMENT FACILITY**  
Operated by CHEM NUCLEAR SYSTEMS, INC  
P O Box 726, Barnwell South Carolina 29812  
(803) 259 1781  
**RADIOACTIVE SHIPMENT MANIFEST FORM**

(3) USE THIS NUMBER ON  
ALL CONTINUATION PAGES

VOLUME ALLOCATION NO 1184-117-A PAGE 1  
OF 2

(4) Tri-  
CARRIER State ADDRESS Joplin, Missouri 64801  
TELEPHONE 417-624-3131 SHIPPING DATE November 6, 1984  
SHIPMENT TYPE Van SHIPMENT SURFACE EXPOSURE      mR/hr  
SHIPMENT NO 615-3013 LINER SERIAL NO       
DRIVER SIGNATURE      DATE     

(5) TOTAL FOR EACH CLASS		PROPER SHIPPING NAME & HAZARD CLASS (PER 49 CFR 172.101)	ID NUMBER
NO OF PACKAGES	WEIGHT (Pounds)		
		Radioactive Material, empty packages	UN2908
		Radioactive Material, fissile, n.o.s. — Radioactive Material	UN2918
<u>10</u>	<u>4344.7</u>	Radioactive Material, low specific activity, n.o.s. — Radioactive Material	UN2912
		Radioactive Material, n.o.s. — Radioactive Material	UN2982
		Radioactive Material, limited quantity, n.o.s. — Radioactive Material	UN2910
		Radioactive Material, special form, n.o.s. — Radioactive Material	UN2974
		Radioactive Material, instruments and articles — Radioactive Material	UN2911
		Other (Specify) <u>Contaminated Soil</u>	

(6) SHIPMENT TOTALS							
VOLUME (Cubic Feet)	TOTAL NO OF PACKAGES	ACTIVITY (10 CFR 20.311)					SOURCE (Pounds)
		ALL ISOTOPIES	TRITIUM	C 14	TC 99	TC 129	
<u>650</u>	<u>10</u>	<u>0.068</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>10</u>

(7) TOTAL SNM	
ISOTOPE	GRAMS
<u>U 233</u>	<u>N/A</u>
<u>U 235</u>	<u>    </u>
TOTAL	<u>↓</u>

(8) TOTAL PALLET VOLUME (CU FT) N/A

(9) WASTE DESCRIPTION Misc Debris (10) PHYSICAL FORM/  
SOLIDIFICATION AGENT Solid

(11) CHEMICAL FORM AND NAME AND % OF CHELATING AGENT(S) Metal Oxides

(12) WASTE FORM CLASS ☒ A ☐ B ☐ C

(13) (X) Yes ( ) No THIS VEHICLE IS CONSIGNED EXCLUSIVE USE LOADING AND UNLOADING MUST BE ACCOMPLISHED BY CONSIGNOR OR CONSIGNEE OR HIS DESIGNATED AGENT

(15) Certification is hereby made to the South Carolina Department of Health and Environmental Control that this shipment of low level radioactive waste has been inspected in accordance with the requirements of South Carolina Radioactive Material License No. 097 as amended and the Nuclear Regulatory Commission's License No. 12 13536 01 as amended and the effective Barnwell Site Disposal Criteria within 48 hours prior to shipment and further certification is made that the inspection revealed no items of non compliance with all applicable laws, rules and regulations

(14) IMPORTANT This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

Signature       
Company Umetco Minerals Corporation Date 11/6/84

Date 11/6/84 By       
Title and Organization Construction Superintendent - Umetco Minerals Corp  
Telephone No ( 716 ) 278-3361

**CNSI USE ONLY**

- ☐ This material meets all license requirements  
☐ This material was disposed of in accordance with license  
☐ Discrepancy

**DISPOSAL SITE COPY**

Form No CNS 201  
(9-83)

SEE INSTRUCTIONS ON REVERSE SIDE  
FOR FILLING OUT THIS FORM

Arrival Date      Arrival Survey No       
Date/Time Buried      H P Initial       
Trench No      Location Code       
Waste Class Code       
Personnel Exposure     

Date       
Authorized Signature      Title     

UCCCNHT00002582



(1) GENERATOR NAME Umetco Minerals Corporation  
ADDRESS 137 - 47th Street  
  
CITY Niagara Falls STATE New York  
CONTACT G E Walck PHONE (716) 278-3361

(2) consigned to  
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P O BOX 726 OSBORN ROAD  
BARNWELL SC 29812

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VOLUME ALLOCATION NO  
1184-117-A

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OF 2

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DRIVER SIGNATURE [Signature] DATE 11-7-84

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		Radioactive Material, fissile, n.o.s. — Radioactive Material	UN2918
<u>10</u>	<u>43447</u>	Radioactive Material, low specific activity, n.o.s. — Radioactive Material	UN2912
		Radioactive Material, n.o.s. — Radioactive Material	UN2982
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		Radioactive Material, special form, n.o.s. — Radioactive Material	UN2974
		Radioactive Material, instruments and articles — Radioactive Material	UN2911
		Other (Specify)	

(6) SHIPMENT TOTALS		ACTIVITY (DOSE RATE) (mR/hr)				SOURCE (Pounds)
VOLUME (Cubic Feet)	TOTAL NO OF PACKAGES	ALL ISOTOPIES	TRITIUM	C-14	CO-60	
<u>650</u>	<u>10</u>	<u>0.068</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>10</u>

(7) TOTAL SNM	
ISOTOPE	GRAMS
<u>U 233</u>	<u>N/A</u>
<u>U 235</u>	<u>N/A</u>
TOTAL	<u>↓</u>

(8) TOTAL PALLET VOLUME (CU FT) N/A

(9) WASTE DESCRIPTION Contaminated Soil  
Misc Debris (10) PHYSICAL FORM/  
SOLIDIFICATION AGENT Solid

(11) CHEMICAL FORM AND NAME AND % OF CHELATING AGENT(S) Metal Oxides

(12) WASTE FORM CLASS ☒ A ☐ B ☐ C

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Signature [Signature]  
Company Umetco Minerals Corporation Date 11/6/84

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Date 11/6/84 By [Signature]  
Title and Organization Construction Superintendent - Umetco Minerals Corp  
Telephone No. (716) 278-3361

**CNSI USE ONLY**

- ☐ This material meets all license requirements  
☐ This material was disposed of in accordance with license  
☐ Discrepancy \_\_\_\_\_

**DISPOSAL SITE COPY**

Form No CNS 201  
(9-83)

SEE INSTRUCTIONS ON REVERSE SIDE  
FOR FILLING OUT THIS FORM

Arrival Date \_\_\_\_\_ Arrival Survey No \_\_\_\_\_  
Date/Time Buried \_\_\_\_\_ H/P Initial \_\_\_\_\_  
Trench No \_\_\_\_\_ Location Code \_\_\_\_\_  
Waste Class Code \_\_\_\_\_  
Personnel Exposure \_\_\_\_\_

Date \_\_\_\_\_  
Authorized Signature \_\_\_\_\_ Title \_\_\_\_\_

UCCCNHT0002584



**Union Carbide Corporation**  
**LINDE DIVISION • GAS PRODUCTS COMPLEX**  
**4501 ROYAL AVENUE NIAGARA FALLS, N.Y. 14303**  
**WEIGHT TICKET**

TSMT #2293  
Mr. Walck  
Bldg 149

12:19P	11/06/84
0000	0000
22 2	22
GROSS	11540 lb ST

12:22P	11/06/84
0000	2293
22 2	22
GROSS	44600 lb
	<u>11540</u>
	33060 DRIVERS

12:23P	11/06/84
0000	2293
22 2	22
GROSS	25720 lb
	<u>44600</u>
	31120 TRAILER

# Union Carbide Corporation

LINDE DIVISION • GAS PRODUCTS COMPLEX  
4501 ROYAL AVENUE NIAGARA FALLS, N.Y. 14303

## WEIGHT TICKET

W/C # 662583  
T/K # 2293

07:56 11/06/84  
0000 T/K # 2293  
22 22  
GROSS 32080

Form RHA-PNC  
(5/80)SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL  
Radioactive Waste Shipment Prior Notification and Manifest Form

See Reverse Side for Instructions		
1. Name and Address of Shipper. Umetco Minerals Corporation 137 - 47th Street Niagara Falls, NY 14302		2. Person Responsible for Radioactive Waste Shipment: (a) Name G.E. Walck (b) Title Construction Superintendent (c) Telephone No. (716) 278-3361
3. Radioactive Waste Transport Permit No. 0211-31-84-X		4. Shipment Identification No.: 1184-117-A
5. Location from which waste will be shipped Same as (1) above		6. Name and Address of Consignee Chem-Nuclear Systems, Inc. P.O. Box 726 Barnwell, South Carolina 29812
7. Scheduled Date of Departure of Shipment: November 6, 1984		8. Estimated Date of Arrival of Shipment November 8, 1984
9. Carrier Tri-State Motor Transit	10. Type of Transport Vehicle Closed Van	11. Trailer No. and Owner (if available)
12. Routes shipment will follow in State of South Carolina (Be Specific)  I-20, I-26, US-321, S.C. 3 and S.C. 64		

Manifest Summary																						
13. Type Container or Cask Wood Boxes	14. Container Spec. CFR 49 173.392 (c)	15. Total No. of Containers 10																				
16. Waste Description, Physical and Chemical Form Contaminated Soil, Metal Oxides, Bldg. Rubble, Wood and Plant Hardware	17. Prominent Radionuclides Uranium (Nat.) .0028 Thorium (Nat.) .004																					
18. Total Curies (mCi) .068	19. Transport Group III	20. Total Cubic Feet 650																				
21. Waste Classification																						
<table border="0"> <tr> <td><input checked="" type="checkbox"/> Radioactive LSA</td> <td><input type="checkbox"/> Bulk LSA</td> <td>Normal Form</td> <td>Special Form</td> <td>Fissile</td> </tr> <tr> <td><input type="checkbox"/> Radioactive LSA greater than Type A quantities</td> <td><input type="checkbox"/> Limited quantities and radioactive devices</td> <td><input type="checkbox"/> Type A quantity</td> <td><input type="checkbox"/> Type A quantity</td> <td><input type="checkbox"/> Class I</td> </tr> <tr> <td></td> <td></td> <td><input type="checkbox"/> Type B quantity</td> <td><input type="checkbox"/> Type B quantity</td> <td><input type="checkbox"/> Class II</td> </tr> <tr> <td></td> <td></td> <td><input type="checkbox"/> Large quantity</td> <td><input type="checkbox"/> Large quantity</td> <td><input type="checkbox"/> Class III</td> </tr> </table>			<input checked="" type="checkbox"/> Radioactive LSA	<input type="checkbox"/> Bulk LSA	Normal Form	Special Form	Fissile	<input type="checkbox"/> Radioactive LSA greater than Type A quantities	<input type="checkbox"/> Limited quantities and radioactive devices	<input type="checkbox"/> Type A quantity	<input type="checkbox"/> Type A quantity	<input type="checkbox"/> Class I			<input type="checkbox"/> Type B quantity	<input type="checkbox"/> Type B quantity	<input type="checkbox"/> Class II			<input type="checkbox"/> Large quantity	<input type="checkbox"/> Large quantity	<input type="checkbox"/> Class III
<input checked="" type="checkbox"/> Radioactive LSA	<input type="checkbox"/> Bulk LSA	Normal Form	Special Form	Fissile																		
<input type="checkbox"/> Radioactive LSA greater than Type A quantities	<input type="checkbox"/> Limited quantities and radioactive devices	<input type="checkbox"/> Type A quantity	<input type="checkbox"/> Type A quantity	<input type="checkbox"/> Class I																		
		<input type="checkbox"/> Type B quantity	<input type="checkbox"/> Type B quantity	<input type="checkbox"/> Class II																		
		<input type="checkbox"/> Large quantity	<input type="checkbox"/> Large quantity	<input type="checkbox"/> Class III																		

UN2912

## CERTIFICATION

I hereby certify on behalf of the above-named shipper to the South Carolina Department of Health and Environmental Control that the information provided herein is complete and correct to the best of my knowledge, and that the shipper has complied with all the provisions as required by Act No. 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act

Date October 22, 1984

G.E. Walck - Construction Supt.  
Typed Name and Title of Agent of Shipper

Signature

G.E. Walck

## CONSIGNEE ACKNOWLEDGEMENT

This acknowledges to the South Carolina Department of Health and Environmental Control that the above-described radioactive waste shipment was received.

Date of Delivery

Signature of Consignee or authorized Agent

Typed or Printed Name and Title

Original: S. Carolina  
Copy: Chem-Nuclear

DHEC 802  
(5/80)

(Copies of this form may be reproduced locally as needed)

UCCNHT0002588

3.0 AT DESTINATION (Union Carbide Corporation, Uravan, Colorado)

- 3.1 Give notification of arrival and receive guidance to unloading site.
- 3.2 Examine security seals and inspect outside of truck for damage or pilfering.
- 3.3 The shipment must be unloaded by Consignor from the transport vehicle in which originally loaded.
- 3.4 UCC or its representative will certify vehicles clean and available for Unrestricted Use and decontaminate if necessary.

4.0 PENALTY

- 4.1 Any deviation from these instructions or violations of State and Federal laws could result in carrier penalty.

  
\_\_\_\_\_  
Driver's Signature

11-6-84  
\_\_\_\_\_  
Date



GENERATOR NAME Umetco Minerals Corporation

PAGE 2 OF 2

(16) ITEM NO	(17) RADIO NUCLIDE EACH CONTAINER	(18) PERCENT OF ACTIVITY EACH NUCLIDE	(19) ACTIVITY EACH CONTAINER (mCi)	(20) PHYSICAL FORM	(21) CHEMICAL FORM AND NAME & OF CHELATING AGENT	(22) WASTE DESCRIPTION	(23) WASTE FORM CLASS	(24) STABILITY CLASS (S, U)	(25) SPECIAL NUCLEAR MATERIAL (grams)	(26) SOURCE MATERIAL (pounds)	(27) DISPOSABLE CONTAINER WEIGHT (pounds)	(28) DISPOSABLE CONTAINER VOLUME (Cu Ft)	(29) CONTAINER TYPE	(30) RADIATION LEVELS		(31) CONTAMINATION CONTAINER SURFACE (RPM/100cm <sup>2</sup> ) Alpha Beta Gamma	(32) DOT SUB TYPE (A1 A2 LSA etc.)	(33) FISSILE CLASS	(34) LABELS/ MARKINGS USED			
														CONTAINER (FT) SURFACE (mR/HR mR/hr)	1 METER SURFACE (mR/HR mR/hr)							
UM84																						
198	U-238	N/A	.0028	Solid			A	U	N/A	0.1	4112	65			.044	.016	MDA	<MDA	LSA	N/A	Radioactive—	LSA
	TH-232		.004																		Radioactive—	
199	U-238		.0028							0.1	4477	65			.036	.014	MDA	<MDA	LSA	N/A	Radioactive—	LSA
	TH-232		.004																		Radioactive—	
204	U-238		.0028							0.1	4306	65			.060	.016	MDA	<MDA	LSA	N/A	Radioactive—	LSA
	TH-232		.004																		Radioactive—	
205	U-238		.0028							0.1	4502	65			.030	.010	MDA	<MDA	LSA	N/A	Radioactive—	LSA
	TH-232		.004																		Radioactive—	
210	U-238		.0028							0.1	4248	65			.030	.012	MDA	<MDA	LSA	N/A	Radioactive—	LSA
	TH-232		.004																		Radioactive—	
215	U-238		.0028							0.1	4182	65			.046	.014	MDA	<MDA	LSA	N/A	Radioactive—	LSA
	TH-232		.004																		Radioactive—	
216	U-238		.0028							0.1	4466	65			.028	.012	MDA	<MDA	LSA	N/A	Radioactive—	LSA
	TH-232		.004																		Radioactive—	
217	U-238		.0028							0.1	4286	65			.030	.015	MDA	<MDA	LSA	N/A	Radioactive—	LSA
	TH-232		.004																		Radioactive—	
218	U-238		.0028							0.1	4474	65			.028	.012	MDA	<MDA	LSA	N/A	Radioactive—	LSA
	TH-232		.004																		Radioactive—	
219	U-238		.0028							0.1	4394	65			.030	.012	MDA	<MDA	LSA	N/A	Radioactive—	LSA
	TH-232		.004																		Radioactive—	
																					Radioactive—	
																					Radioactive—	

**CUSTOMER'S COPY**

UCCNHT00002590

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL  
Radioactive Waste Shipment Certification Form

General Instructions and Information: This is a two part form to be used by shippers and carriers of radioactive waste. The certifications contained herein satisfy the requirements of Section 13-7-150, of Act No. 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act. This certification along with a copy of the prior notification form shall accompany each shipment of radioactive waste into and within the State of South Carolina. The shipper is to complete his portion of the form and present it to the carrier as part of the shipping documents. Upon receipt, the carrier shall complete his portion of the form. Upon delivery of the shipment to the consignee, a copy of this certification form, and a copy of the Prior Notification and Manifest form with the consignee acknowledgement, shall be returned to the Department.

Part I: Shipper's Certificate of Compliance

1. Name of Shipper and Address: Umetco Minerals Corporation 137 - 47th Street Niagara Falls, NY 14302 Telephone No. ( 716 ) 278-3361	2. Shipment Identification No.  1184-117-A
	3. Transport Permit No. 0211-31-84-X

In compliance with Act No. 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act, I hereby certify on behalf of the above-named shipper to the South Carolina Department of Health and Environmental Control that the above-named shipper has complied with all provisions of Act No. 499 of 1980, and all applicable laws and administrative rules and regulations, both State and Federal, regarding the packaging, transportation, storage, disposal and delivery of such wastes. I further certify that this shipment of radioactive waste has been inspected within 48 hours of the time of departure and that no items of non-compliance with applicable laws, rules or regulations were found.

Date November 6, 1984  
  
G.E. Walck, Construction Superintendent  
Typed Name and Title of Agent of Shipper

G.E. Walck  
Signature

Part II: Carrier's Certification

1. Name of Carrier and Address: Tri-State Motor Transit Company P.O. Box 113 Joplin, Missouri 64801 Telephone No. (800) 641-7591	2. Shipment Identification No.  1184-117-A
	3. Transport Trailer No. <u>445147</u>
4. Scheduled Date of Departure of Shipment:  November 6, 1984	5. Estimated Date of Arrival of Shipment:  November 8, 1984

Certification is hereby made to the South Carolina Department of Health and Environmental Control that: (a) the shipper has provided the carrier with a copy of the shipment manifest, the certificate of compliance, and the routing instructions; (b) the shipment of radioactive waste has been properly placarded for transport according to applicable U.S. Department of Transportation Regulations; (c) all shipping papers originated or reproduced by the carrier have been properly executed; (d) the transport vehicle has been inspected according to applicable State and Federal regulations within the prescribed intervals and that all safety and operational components are in good working order and meet the requirements of regulations; (e) all drivers who will operate the vehicle within the State of South Carolina are qualified to transport hazardous materials as specified by applicable U.S. Department of Transportation regulations; (f) the Department shall be immediately notified of any variance, occurring after departure, from the shipper's notification of primary routes in South Carolina and estimated date of arrival; (g) all applicable laws and administrative rules and regulations, both State and Federal, regarding the transportation of radioactive wastes will be complied with.

Date November 6, 1984  
  
Richard B Jones DRIVER  
Typed or Printed Name and Title

Richard B Jones  
Signature

Tri-State Motor Transit Company

Carrier's No. 662583

Name of Carrier

RECEIVED subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading

UMETCO MINERALS CORPORATION

AT ~~Marietta, Ohio~~ Niagara Falls, NY 11-6 19 84 From~~METALS DIVISION~~  
~~UNION CARBIDE CORPORATION~~

For use via carrier truck under the exclusive/sole use shipments/movements

the property described below, in apparent good order except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood through out this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official Southern, Western and Illinois Freight Classifications in effect on the date hereof if this is a rail or a rail water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns

Consigned to ~~UGX Metals Division~~ Chem Nuclear Systems Inc. Barnwell Management Facilities

SHIPPER'S ORDER NO

CUSTOMER'S ORDER NO

Destination ~~Gravatt~~ Barnwell (Osborn Road) State ~~Colorado~~ S. Carolina County ~~Montrose~~ Barnwell

Route

Delivering Carrier Tri-State Motor Transit

Car or Vehicle Initials 2293

No 445147 Seal No 262527

No Packages	Kind of Package, Description of Articles, Special marks, and Exceptions	*Weight (Sub to correction)	*Class or Rate	Check Column
10	Radioactive Materials LSA nos (650 cu. ft.)	43740		
	<del>Radioactive Material - UN-2912</del>			
	<del>U-238 Natural</del>			
	<del>Uranium, Thorium Residues (From Chemical Processing)</del>			
	<del>0.016 Max Gross per Package</del> Less than one (1) pound source			
	material - solid, metal oxide, contaminated soil, building rubble, wood and plant equipment			
	This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation			
	Signed <i>J. E. Walck</i>			
	Vehicle assigned for sole use of consignor. Do not load other freight on the vehicle. do not transfer in route and do not break the seal on truck			
	Carrier hereby acknowledges that prior to or at the time this shipment was offered for transportation, the shipper provided or affixed, according to applicable regulations, the required placards or orange panels (including prescribed identification numbers) for each hazardous material named hereon			
	Signed <i>Richard B. Jones</i>			

Subject to Section 7 of Conditions of applicable bill of lading if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges

(Signature of consignor)

if charges are not to be prepaid, carrier to stamp here "Not Prepaid"

Third Party  
PREPAID (See below)\*

Received \$  
to apply in prepayment of the charges on the property described hereon

Agent or Cashier

Per  
(The signature here acknowledges only the amount prepaid)

Charges advanced

\$  
This shipment is correctly described

Correct weight is \_\_\_\_\_ lbs

Subject to verification by the

\*L.G. Evans

Umetco Minerals Corp.

P.O. Box 97  
Niagara Falls, NY 14302

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

per

~~METALS DIVISION~~ UMETCO MINERALS CORPORATION  
~~UNION CARBIDE CORPORATION~~

Shipper

Agent

Per

Per

Permanent postoffice  
address of shipper  
UC 326-34

G.E. Walck

UCCNHT0002592